



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,256	09/21/2004	Pekka Laitinen	089229.00064	3821
32294	7590	12/10/2007		
SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER JUNG, DAVID YIUK	
			ART UNIT	PAPER NUMBER
			2134	
			MAIL DATE	DELIVERY MODE
			12/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/505,256	<b>Applicant(s)</b> LAITINEN ET AL.	
	<b>Examiner</b> David Y. Jung	<b>Art Unit</b> 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on file is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2004</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### CLAIMS PRESENTED

Claims 1-48 are presented.

Note that the ISN reference (see the rejection section) mentions Windows 2000 and therefore explicitly mentions that the features were already being used as to year 2000.

### CLAIM REJECTIONS

#### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Regarding claims 1-48, the claimed invention is directed to non-statutory subject matter. Claims recite only perfunctory recitation of functional material (network, telecommunications, equipment, etc.). Aside from this, the claims recite only nonfunctional descriptive material. When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable

as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”). Such a result would exalt form over substance.

For further guidance on the term “nonfunctional”, please see MPEP 2106.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asokan (cited by Applicant, WO 02/21464) and ISN (VPN Questions Answered, InfoSec News, 2003).

Claims 1, 17, 33 are independent claims. The other claims are the dependent claims.

Regarding claim 1, Asokan teaches “A method for requesting a digital certificate in a mobile telecommunications network, the method including the steps of: sending a request for a digital certificate from a subscriber to a network element via the network, the request including a first part and a second part; ( Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence, “digital sign”) [ ].

These passages of Asokan do not teach “wherein ... authenticated .... unprotected ...” in the sense of the claim.

ISN teaches “wherein the first part is sent via an authenticated communication channel of the network and the second part is sent via an unprotected communication channel of the network (ISN, the paragraph on protected wireless – the VPN is cited as an authenticated channel but is noted that the cost is high and therefore an unprotected channel should be used as well)” for the motivations of security and efficiency. Note that the ISN reference (see the rejection section) mentions Windows 2000 and therefore explicitly mentions that the features were already being used as to year 2000.

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of ISN and Asokan for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Claims 2-5:

2. A method according to claim 1, wherein the first part includes data that is relatively more security- critical than data in the second part.

3. A method according to claim 1 or 2, further including the steps of:  
sending a response to the request, the response including a third part and a fourth part;  
wherein the third part is sent via an authenticated communication channel of the network and the fourth part is sent via an unprotected communication channel of the network.

4. A method according to claim 3, wherein the third part includes data that is relatively more security- critical than data in the fourth part.

5. A method according to any one of the preceding claims, wherein:  
the authenticated channel is a signaling plane; and

the unprotected channel is a user plane.

Claims 2-5 recite the nature of having more than one channel with each channel having different security concerns. See ISN, the paragraph on protected wireless, for having different security concerns. See Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence, for having different channels. Thus, claims 2-5 are suggested by the obvious variants of ISN and Asokan.

Claims 6-14 recite various certification handlings. See Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence. This teaches digital signs. Thus, the features of claims 6-14 are suggested by the obvious variants of ISN and Asokan.

Claims 15-16 recite the nature of having more than one channel with each channel having different security concerns. See ISN, the paragraph on protected wireless, for having different security concerns. See Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence, for having different channels. Thus, claims 2-5 are suggested by the obvious variants of ISN and Asokan.

Regarding claim 17, Asokan teaches "Communication network apparatus for processing a request for a digital certificate in a mobile telecommunications network, the apparatus being configured to:  
receive at a network element a request for a digital certificate from a subscriber, the request including a first, part and a second part; ( Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence, "digital sign") [ ]."

These passages of Asokan do not teach "wherein ... authenticated .... unprotected ..." in the sense of the claim.

ISN teaches “wherein the first part is sent via an authenticated communication channel of the network and the second part is sent via an unprotected communication channel of the network (ISN, the paragraph on protected wireless – the VPN is cited as an authenticated channel but is noted that the cost is high and therefore an unprotected channel should be used as well)” for the motivations of security and efficiency.

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of ISN and Asokan for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Claims 18-21, 31-32 recite the nature of having more than one channel with each channel having different security concerns. See ISN, the paragraph on protected wireless, for having different security concerns. See Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence, for having different channels. Thus, claims 2-5 are suggested by the obvious variants of ISN and Asokan.

Claims 22-30 recite various certification handlings. See Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence. This teaches digital signs. Thus, the features of claims 6-14 are suggested by the obvious variants of ISN and Asokan.

Regarding claim 33, Asokan teaches “Mobile user equipment (UE) for requesting a digital certificate from a network entity in a mobile telecommunications network, the UE being configured to:

send a request for a digital certificate to the network element via the network, the request including a first part and a second part; ( Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence, “digital sign”) [ ].”

These passages of Asokan do not teach “wherein ... authenticated .... unprotected ...” in the sense of the claim.

ISN teaches “wherein the first part is sent via an authenticated communication channel of the network and the second part is sent via an unprotected communication channel of the network (ISN, the paragraph on protected wireless – the VPN is cited as an authenticated channel but is noted that the cost is high and therefore an unprotected channel should be used as well)” for the motivations of security and efficiency.

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of ISN and Asokan for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Claims 34-37, 47-48 recite the nature of having more than one channel with each channel having different security concerns. See ISN, the paragraph on protected wireless, for having different security concerns. See Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence, for having different channels. Thus, claims 2-5 are suggested by the obvious variants of ISN and Asokan.

Claims 38-46 recite various certification handlings. See Asokan, page 3, 2<sup>nd</sup> full paragraph, last sentence. This teaches digital signs. Thus, the features of claims 6-14 are suggested by the obvious variants of ISN and Asokan.

### ***Conclusion***

The art made of record and not relied upon is considered pertinent to applicant's disclosure. The art disclosed general background.



Application/Control Number:  
10/505,256  
Art Unit: 2134

Page 8

***Points of Contact***

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(571) 273-8300, (for formal communications intended for entry)

**Or:**

(571) 273-3836 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Jung whose telephone number is (571) 272-3836 or Kambiz Zand whose telephone number is (272) 272-3811.

Application/Control Number:  
10/505,256  
Art Unit: 2134

Page 9

David Jung

-----

Patent Examiner

12/6/07

A handwritten signature in black ink, consisting of a large loop followed by several smaller, connected loops and a final upward stroke.